

IN COMMITTING to make these crossings safer, states—including North Carolina—must rely heavily on the Federal Highway Administration (FHWA) for federally supplied funds. The funds are authorized in Title 23 United States Code (23 U.S.C.) Section 130. Originally referred to as "Section 130 funds," these dollars are now authorized under the SAFETEA-LU Program (Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users).

Each state determines which public rail crossings need improvements and what those safety improvements will be. North Carolina has implemented traffic control devices such as crossbucks, bells, gates, flashing lights, advance warning signs, and pavement markings.



The Drive for SAFETY

There are more than 250,000 public and private at-grade rail crossings throughout the United States. Sadly, there are between 300 and 400 fatalities at these crossings each year.

Public Crossings Only

Under the current SAFETEA-LU Program and historically, "Section 130" funds can only be used to eliminate hazards at public highway-railroad grade crossings. Public crossings are those at which the highway or roadway is under the jurisdiction of and maintained by a public authority such as a municipality, county, or state agency. These federal funds cannot be used for safety improvements at private rail crossings.

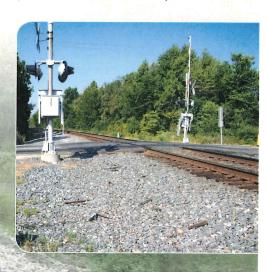
Impact of "Section 130" Funding

Since this Program began in 1974, approximately \$3.8 billion has been obligated for grade-crossing improvements. In 2005 Congress increased funding for the program to \$220 million a year as part of SAFETEA-LU. This designated appropriation now ensures that highway-railroad grade-crossing safety programs do not compete against other transportation needs such as highway construction or maintenance.

Safety improvements made through this Program have helped prevent an estimated 10,500 fatalities and 51,000 nonfatal injuries.

Our Challenge:Obligating These Funds

The obligation of highway-railroad at-grade crossing safety improvement funds within this Program depends not only upon a state transportation agency's providing authorization for preliminary engineering and construction, but it also depends upon the railroad's ability to implement work on the projects. Before funding is obligated for construction, preliminary engineering work by the state and railroad must occur. These activities include development of priority lists and programming of annual projects, development of agreements and acceptance by local road authorities, historical and environmental clearances for projects, and initial planimetric designs by states. (See Timetable on reverse side.)



THE TIMETABLE

After the beginning of Federal Fiscal Year on October 1

Internal preconstruction activities including planimetric development and NEPA clearance occur.

(usually 4-6 months)

State submits projects to individual railroads for full civil & electrical design, plans, and estimates.

(usually 4-6 months)

State reviews railroad plans & estimates as required.

(usually 4-6 week turnaround)

With final preconstruction review completed, railroad authorizes project for construction.

Remaining federal funds obligated to individual authorizations for expenditure.

Railroad orders materials and schedules and completes construction.

(usually 6-9 months)

TIME NEEDED

Estimated 9 to 13 months for preconstruction activities

Consider This

There are compliance considerations — with state laws, local road authorizations for work, Federal-Aid Policy, Disadvantaged Business Enterprise (DBE) requirements, and National Environmental Protection Act (NEPA). There is the necessary time to plan, cost, and properly design today's state-of-the-art highway-rail at-grade crossing signal system, which is often integrated into other highway and railroad traffic control devices. When all is said and done, it takes nine (9) to thirteen (13) months after the beginning of a given fiscal year before Federal Crossing Hazard Elimination Funds are fully obligated. Moreover, some states do not have adequate resources dedicated to the expenditure of these "Section 130" funds.

Adding further to the project timeline are state and railroad requirements to outsource engineering and environmental planning. Through the use of master project agreements, innovative environmental review and clearance processes, as well as standard consulting agreements for outsourced work, states and railroads work continually to minimize coordination, design, and construction time.

Increasing Safety Concerns, Growing Needs

The Federal Highway Administration estimated in 2002 that freight transported by railroads could double within the next two decades. Crossings near the nation's major rail yards and ports will experience increased traffic as well, due to increases in domestic and foreign trade. In addition to this freight growth, passenger corridors are being developed around the country through the Passenger Rail Investment and Improvement Act.

While individual railroads are working with state transportation agencies to close as many grade crossings as possible, this effort remains an enormous challenge. The Department of Transportation estimates that 94% of all grade-crossing accidents are caused by risky driver behavior. Crashes at highway-rail crossings can also cause train derailments, resulting in hazardous material spills that often necessitate evacuations. In fact, locomotives risk derailments whenever engineers apply emergency brakes while attempting to avoid hitting vehicles or pedestrians.

With a nationwide increase in vehicle miles traveled, USDOT estimates a loss-of-life value of \$5.8 million, with additional related losses due to injury, property loss, and transportation network disruption. For both safety and economic reasons, it is essential that the nation's grade crossings are clearly marked with gates, flashing lights, or advance warning signs. Dedicated crossing safety (or "Section 130") funding enables states to maintain existing warning devices, while upgrading older signals with more modern technology.

Contact: Paul Worley

Director – Engineering & Safety

NCDOT – Rail, Engineering & Safety Branch

1556 MSC

Raleigh, NC 27699-1556

(919) 715-8740 | pworley@ncdot.gov